

REMARKS

Claims 1-22 and 37-39 have been cancelled without prejudice or disclaimer to the subject matter contained therein. Claims 23-36 were rejected in an Office Action dated November 13, 2008. The claims have been editorially amended. Support for the amendments may be found in the "Detailed Description of the Invention." Applicants respectfully request reconsideration of the present application in view of the following remarks.

I. Drawings

Formal drawings are attached and overcome the Examiner's objections raised in the Office Action.

II. Claims

The claims have been amended to overcome the objections raised by the Examiner in the Office Action.

III. The Claims are Not Anticipated by the Prior Art

Claims 23-29, 31, 35 and 36 were rejected under 35 U.S.C. §102(b) as being anticipated by Reed (USPN 3,349,396). Applicants respectfully traverse this rejection.

Applicants respectfully submit that Reed '396 relates to a material for attenuating radiation in the frequency range of radar, which means the absorption of radar waves. Radar waves are very different from the infrared waves of the present invention. Radar waves have a frequency between $10^9 - 10^{10}$ Hz = 1 to 50 cm wavelength. In contrast, infrared waves have a frequency of $10^{13} - 10^{14}$ Hz = 1 to 20 μm wavelength. Accordingly, the means for detection of radar waves (1-50 cm wavelength) versus infrared waves (1 to 20 μm wavelength) are very different. As well, the means for protection against detection of radar versus infrared wavelengths is also very different. Reed especially describes means for the absorption of radar waves (i.e., absorption sheet using carbon). The present invention is focused on the reflection of the infrared waves using a metallized membrane. Therefore, applicants respectfully submit that Reed would not function in the same way as applicants' claimed invention, and thus this reference is not relevant or applicable, as it relates to a different technical field.

The Office Action states that a metallized water-vapor-permeable ply can be found in Reed in the combination of the layers 33 and 34. Column 7, lines 38 to 41 of Reed discloses a conductive sheet 33 which is a sheet of plastic with

metal coated thereon and underlying the conductive sheet 33 is a light cotton fabric 34.

In contrast to the teachings of Reed, the present invention clearly identifies and claims that the metallized ply itself is water-vapor-permeable. Therefore, the present invention provides a construction where there is only one ply (layer) which is both metallized and water-vapor-permeable. Applicants submit that here is no teaching in Reed that the conductive sheet 33 in form of a metal coated plastic sheet is also water-vapor-permeable. Additionally, there is no teaching in Reed that the cotton fabric 34 itself is also metallized.

It was further stated in the Office Action that Reed discloses at least one ply that is air permeable, drapable, convective and has a three dimensionally transmissive structure. Again, the position in the Office Action combines two sheets for this purpose, the absorber sheet 32 with the underlying spacer sheet 31. The absorber sheet 32 is described in Reed in column 4, lines 33 to 40: "A typical absorber sheet comprises a glass fabric that has an elastomer coated thereon such as neoprene or the like, or other flexible synthetic resin." Thus, there is no disclosure in Reed that the absorber sheet 32 is air permeable, convective (see the definition of "convective ply" in paragraph 33 of the US'431) and having a three dimensional transmissive structure.

With regard to the spacer sheet 31, Reed describes the spacer sheet 31 (column 5, line 26 to 58) as an embossed film of plastic, which is in an preferred embodiment imperforate; however, holes through the sheet are acceptable and serve to decrease the weight slightly. There is no teaching in Reed that the spacer sheet is air-permeable. Additionally, according to the teachings of Reed, all layers are enveloped and sealed with waterproof plastic material. Therefore an air-permeable structure is not anticipated, disclosed or suggested.

For the foregoing, reasons, applicants submit that the claimed invention is not anticipated, disclosed or suggested. Accordingly, applicants respectfully request that this rejection be withdrawn.

IV. The Claims Are Neither Disclosed Nor Suggested by the Cited

References

Claims 30 was rejected under 35 U.S.C. §103(a) as being unpatentable over Reed (USPN 3,349,396) in view of Kim et al. (USPN 6,007,898). Furthermore, claims 32-34 were rejected under 35 U.S.C. 103(a) as being

unpatentable over Reed (USPN 3,349,396). Applicants respectfully traverse this rejection.

Applicants respectfully repeat the arguments made earlier herein with respect to Reed '396 overcome the 35 U.S.C. 103(a) rejections made herein. Specifically, applicants submit that the claimed invention is not anticipated, disclosed or suggested by the teachings of Reed.

With respect to Kim et al., this reference was relied on in the Office Action to teach a compressible material that is pimpled and can be made from wovens, knits or non-wovens.

Applicants respectfully submit that the teachings of Kim et al. do not overcome the deficiencies of Reed and described in detail earlier herein. Accordingly, applicants submit that these rejections should be withdrawn.

V. Conclusion

For the foregoing reasons, the present invention as defined by claims 23-36 is neither taught nor suggested by any of the references of record. Accordingly, applicants respectfully submit that these claims are now in form for allowance. If further questions remain, applicants request that the Examiner telephone applicants' undersigned representative before issuing a further Office Action.

Respectfully submitted,



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